

What is claimed is:

1. A medical device, comprising:
 - a biodegradable apparatus having a surface;
 - at least one bioactive agent; and
 - biological material loaded onto at least a portion of the surface of said apparatus, said biological material comprising said at least one bioactive agent, wherein said biological material is crosslinked with a crosslinking agent or with ultraviolet irradiation.
2. The device of claim 1, wherein the crosslinking agent is genipin, its analog, derivatives, and combination thereof.
3. The device of claim 1, wherein the crosslinking agent is selected from a group consisting of formaldehyde, glutaraldehyde, dialdehyde starch, glyceraldehydes, cyanamide, diimides, diisocyanates, dimethyl adipimidate, carbodiimide, epoxy compound, and mixture thereof.
4. The device of claim 1, wherein the apparatus is a stent.
5. The device of claim 1, wherein the apparatus is a non-stent implant.
6. The device of claim 1, wherein the apparatus is selected from a group consisting of annuloplasty rings, heart valve prostheses, venous valve bioprostheses, orthopedic implants, dental implants, ophthalmology implants, cardiovascular implants, and cerebral implants.
7. The device of claim 1, wherein the biological material is selected from a group consisting of collagen, gelatin, elastin, chitosan, N, O, carboxymethyl chitosan, and mixture thereof.
8. The device of claim 1, wherein the biological material is a solidifiable substrate, and wherein the biological material is solidifiable from a phase selected from a group consisting of solution, paste, gel, suspension, colloid, and plasma.

9. The device of claim 1, wherein the biodegradable apparatus is made of a material selected from a group consisting of polylactic acid (PLA), polyglycolic acid (PGA), poly (D,L-lactide-co-glycolide), polycaprolactone, and co-polymers thereof.
10. The device of claim 1, wherein the biodegradable apparatus further comprises at least one bioactive agent.
11. The device of claim 1 or 10, wherein the at least one bioactive agent is selected from a group consisting of analgesics/antipyretics, antiasthmatics, antibiotics, antidepressants, antidiabetics, antifungal agents, antihypertensive agents, anti-inflammatories, antineoplastics, antianxiety agents, immunosuppressive agents, antimigraine agents, sedatives/hypnotics, antipsychotic agents, antimanic agents, antiarrhythmics, antiarthritic agents, antigout agents, anticoagulants, thrombolytic agents, antifibrinolytic agents, antiplatelet agents and antibacterial agents, antiviral agents, antimicrobials, and anti-infectives.
12. The device of claim 1 or 10, wherein the at least one bioactive agent is selected from a group consisting of actinomycin D, paclitaxel, vincristin, methotrexate, and angiopeptin, batimastat, halofuginone, sirolimus, tacrolimus, everolimus, tranilast, dexamethasone, and mycophenolic acid.
13. The device of claim 1 or 10, wherein the at least one bioactive agent is selected from a group consisting of lovastatin, thromboxane A₂ synthetase inhibitors, eicosapentanoic acid, ciprostone, trapidil, angiotensin converting enzyme inhibitors, aspirin, and heparin.
14. The device of claim 1 or 10, wherein the at least one bioactive agent is selected from a group consisting of allicin, ginseng extract, flavone, ginkgo biloba extract, glycyrrhetic acid, and proanthocyanides.

15. The device of claim 1 or 10, wherein the at least one bioactive agent comprises ApoA-I Milano or recombinant ApoA-I Milano/phospholipid complexes.

16. The device of claim 1 or 10, wherein the at least one bioactive agent comprises biological cells.

17. The device of claim 1 or 10, wherein the at least one bioactive agent comprises lipostabil.

18. The device of claim 1 or 10, wherein the at least one bioactive agent comprises a growth factor.

19. The device of claim 18, wherein the growth factor is selected from a group consisting of vascular endothelial growth factor, transforming growth factor-beta, insulin-like growth factor, platelet derived growth factor, fibroblast growth factor, and combination thereof.

20. The device of claim 1 further comprising a biodegradable polymer loaded onto at least a portion of the surface of said apparatus.

20. A biodegradable medical device comprising at least one bioactive agent selected from a group consisting of ApoA-I Milano, recombinant ApoA-I Milano/phospholipid complexes, lipostabil, and combination thereof.

21. A method for treating a target tissue of a patient, comprising:

providing a medical device comprising: a biodegradable apparatus having a surface, wherein a biological material loaded onto at least a portion of the surface of said apparatus, said biological material comprising at least one bioactive agent;

crosslinking said biological material with a crosslinking agent or with ultraviolet irradiation; and

delivering said medical device to the target tissue and releasing said bioactive agent for

treating the target tissue.

22. The method of claim 21, wherein the crosslinking agent is genipin, its analog, derivatives, and combination thereof.

23. The method of claim 21, wherein the crosslinking agent is selected from a group consisting of formaldehyde, glutaraldehyde, dialdehyde starch, glyceraldehydes, cyanamide, diimides, diisocyanates, dimethyl adipimidate, carbodiimide, epoxy compound, and mixture thereof.

24. The method of claim 21, wherein the medical device is a stent.

25. The method of claim 21, wherein the medical device is a non-stent implant.

26. The method of claim 21, wherein the medical device is selected from a group consisting of annuloplasty rings, heart valve prostheses, venous valve bioprotheses, orthopedic implants, dental implants, ophthalmology implants, cardiovascular implants, and cerebral implants.

27. The method of claim 21, wherein the biological material is selected from a group consisting of collagen, gelatin, elastin, chitosan, N, O, carboxylmethyl chitosan, and mixture thereof.

28. The method of claim 21, wherein the biodegradable apparatus is made of a material selected from a group consisting of polylactic acid (PLA), polyglycolic acid (PGA), poly (D,L-lactide-co-glycolide), polycaprolactone, and co-polymers thereof.

29. The method of claim 21, wherein the biodegradable apparatus further comprises at least one bioactive agent.

30. The method of claim 21 or 29, wherein said bioactive agent is selected from a group consisting of analgesics/antipyretics, antiasthmatics, antibiotics, antidepressants, antidiabetics,

antifungal agents, antihypertensive agents, anti-inflammatories, antineoplastics, antianxiety agents, immunosuppressive agents, antimigraine agents, sedatives/hypnotics, antipsychotic agents, antimanic agents, antiarrhythmics, antiarthritic agents, antigout agents, anticoagulants, thrombolytic agents, antifibrinolytic agents, antiplatelet agents and antibacterial agents, antiviral agents, antimicrobials, and anti-infectives.

31. The method of claim 21 or 29, wherein said bioactive agent is selected from a group consisting of actinomycin D, paclitaxel, vincristin, methotrexate, and angiopeptin, batimastat, halofuginone, sirolimus, tacrolimus, everolimus, tranilast, dexamethasone, and mycophenolic acid.

32. The method of claim 21 or 29, wherein said bioactive agent is selected from a group consisting of lovastatin, thromboxane A₂ synthetase inhibitors, eicosapentanoic acid, ciprostone, trapidil, angiotensin converting enzyme inhibitors, aspirin, and heparin.

33. The method of claim 21 or 29, wherein said bioactive agent is selected from a group consisting of allicin, ginseng extract, flavone, ginkgo biloba extract, glycyrrhetic acid, and proanthocyanides.

34. The method of claim 21 or 29, wherein said bioactive agent comprises ApoA-I Milano or recombinant ApoA-I Milano/phospholipid complexes.

35. The method of claim 21 or 29, wherein said bioactive agent comprises biological cells.

36. The method of claim 21 or 29, wherein said bioactive agent comprises lipostabil.

37. The method of claim 21 or 29, wherein said bioactive agent comprises growth factor.

38. The method of claim 21 or 29, wherein said bioactive agent comprises genes.

39. The method of claim 21, wherein the target tissue comprises vulnerable plaque or atherosclerotic plaque, wherein the vulnerable plaque is the atherosclerotic plaque that is vulnerably prone to rupture.

40. The method of claim 21, wherein the target tissue is selected from a group consisting of tumor, cancer, brain tissue, vascular vessel, and orthopedic tissue.

41. The method of claim 21, wherein the target tissue is selected from a group consisting of lymphatic vessel, gastrointestinal tract, hepatic duct, bile duct, pancreatic duct, urinary tract, ureter, urethra, and reproductive tract.